

Date: Thursday, 18/09/2008 11:13:26 AM  
 User: Julie Lecocq

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : TUBE ASSEMBLY
<b>Job Number</b> : 42108	
<b>Estimate Number</b> : 11198	
<b>P.O. Number</b> :	<b>Part Number</b> : D3304041
<b>This Issue</b> : 18/09/2008 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3304 REV. B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : // <b>Type</b> : MACHINED PARTS	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 41901	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 10/10/2008 <b>Qty:</b> 4 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JUL 08.9.18</u>	
<b>Comment</b> : Est: C 04.11.17 Step 13 revised KJ/JLM	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	M304TR0875W065	304 round tube .875 x .065w
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**Comment:** Qty.: 1.4109 f(s)/Unit Total : 5.6435 f(s)  
 Material: AISI 304/316 SS tubing 0.875" x 0.065" wall  
 (M304TR0.875W.065)  
 Identify for D3304-1  
 Batch: M109007

J.F. 08/09/21 (4)

2.0	BAND SAW	BAND SAW
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**Comment:** BAND SAW  
 Cut to length

J.F. 08/09/21 (4)

3.0	LATHE CONV.	CONVENTIONAL LATHE
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**Comment:** CONVENTIONAL LATHE  
 Cut blank: 15.75" as per Dwg D3304  
 Turn as per Dwg D3304  
 Identify as D3304-1

J.F. 08/09/21 (4)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 08/09/21 (4)

5.0	QC8	SECOND CHECK
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**Comment:** SECOND CHECK

J.F. 08/09/21 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 18/09/2008 11:13:26 AM  
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 42108

Part Number: D3304041

Job Number:



Seq. #: Machine Or Operation: Description :

6.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr

Drill as per Dwg D3304 using drill Jig D3304-T1

Deburr

FF 08/10/21

(4)

7.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

508/10/21 (4)

8.0 D33045 Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bracket

Pick:

Qty Part Number Description Batch  
1 D3304-5 Bracket

340203

EL 8-10-30 (4)

9.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld bracket as per Dwg D3304 and QSI 004

M107051

EL 8-10-30 (4)

10.0 QC9 VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

Cpl 08-10-2030 M08/10/30

(4)

11.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

508/10/30 (4)

12.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

9-10  
320 OF  
9-40

M-1 08/10/31

(4X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 42108

Part Number: D3304041

Job Number:



Seq. #: Machine Or Operation:

Description :

13.0

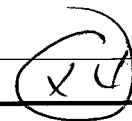
QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08-10-31



14.0

BLBS0016

PIP PIN



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

PIP PIN

Pick:

Qty	Part Number	Description
1	BLBS-0016	Pip Pin

Batch

M108910

SP

15.0

CBL460

Loop Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Loop Sleeve

Pick:

Qty	Part Number	Description
2	CBL-460	Loop Sleeve

Batch

M109062

8/11/3

SP

16.0

CBL1240

Cable



Comment: Qty.: 1.0417 f(s)/Unit Total : 4.1668 f(s)

Cable

Pick:

Qty	Part Number	Description
12.5"	CBL-1240	Cable

Batch

M107234

8/11/3

(4x)

17.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble lanyard and pip pin as per Dwg D3304

FF

08/11/03

(4)

18.0

QC5

INSPECT WORK TO CURRENT STEP



08/11/04 (4)



Comment: INSPECT WORK TO CURRENT STEP

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N as per Dwg using a permanent fine point marker, then Stock

Location: ST 188

8/11/04

(4x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 42108

Part Number: D3304041

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

QC21

FINAL INSPECTION/W/O RELEASE



08/11/05 *[Signature]*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*mf* 08-11-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

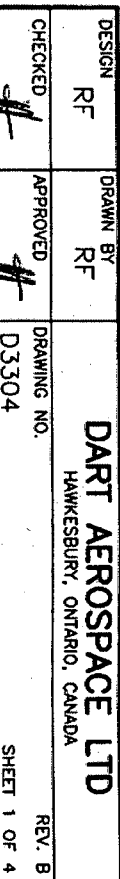
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries







DESIGN	RF	DRAWN BY	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA		REV. B
CHECKED		APPROVED		DRAWING NO.	D3304	SHEET 1 OF 4
DATE	05.07.15			TITLE	TUBE ASSEMBLY	
A	04.08.18			NEW ISSUE		
B	05.07.15			UPDATE DIMENSIONS; ADD D3304-7/-8		



D3304-041/-043/-044 NOTES:

- 1) FINISH: POWDER COAT GREY SANDEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES

BREAK ALL SHARP EDGES 0.005 TO 0.015

IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART  
AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"  
IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT

PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

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75-8811

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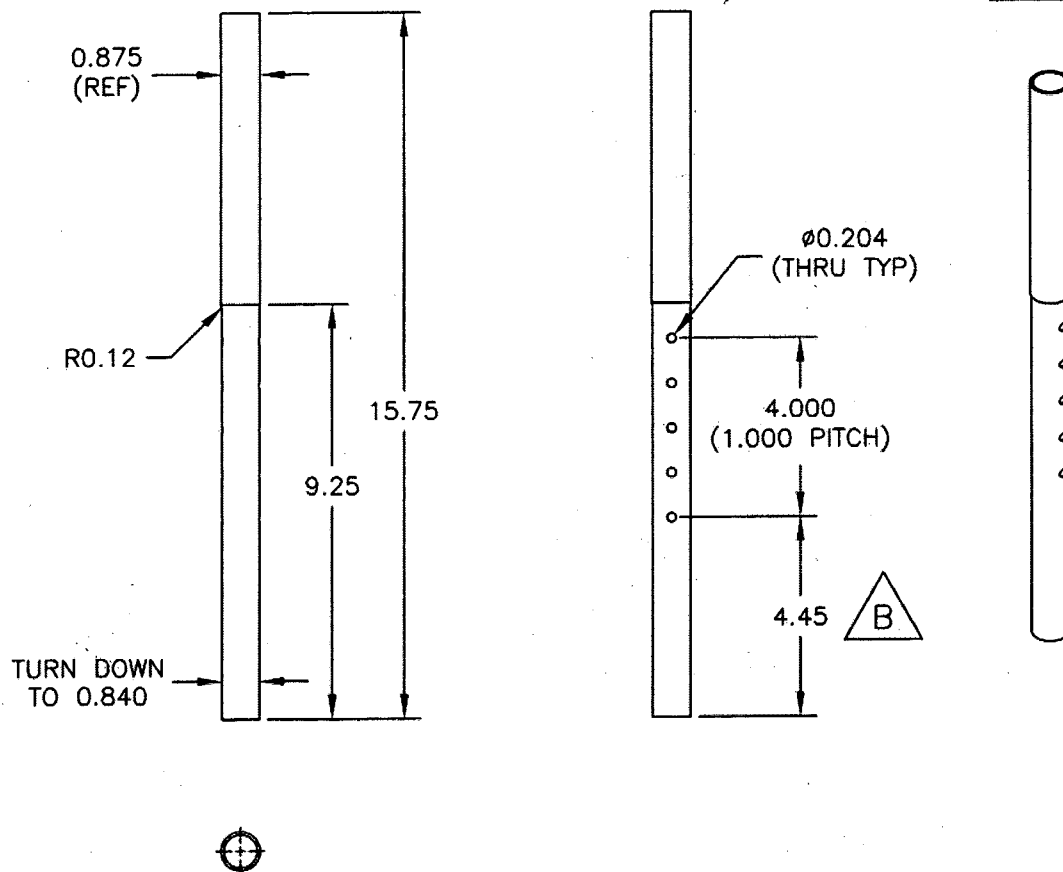
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DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:4

RELEASED  
05-08-11



### D3304-1 TUBE

#### D3304-1 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE  $\phi 0.875 \times 0.065$  WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

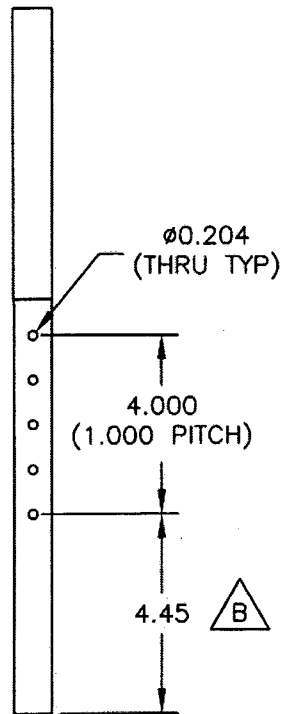
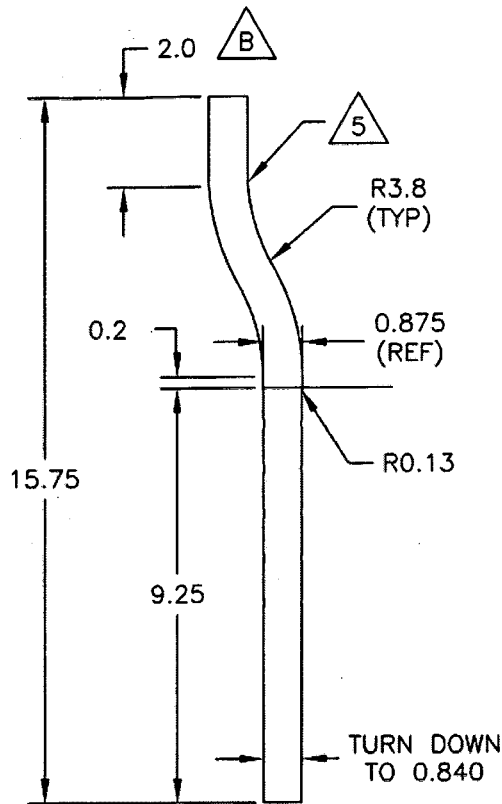
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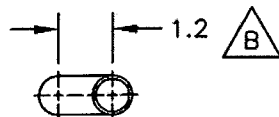
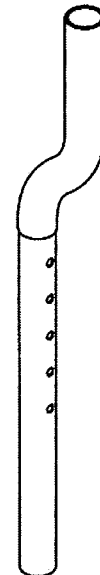
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DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:4



RELEASED  
05-08-11 *[Signature]*



### D3304-3 TUBE

#### D3304-3 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE  $\phi 0.875 \times 0.065$  WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

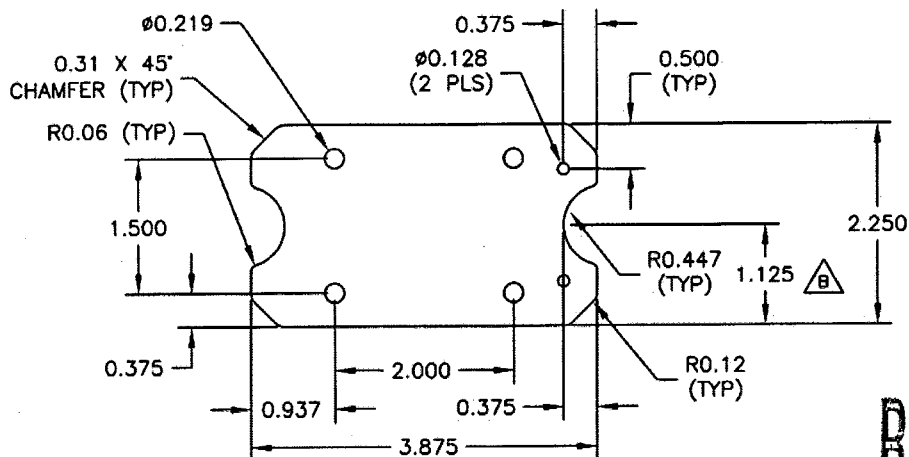
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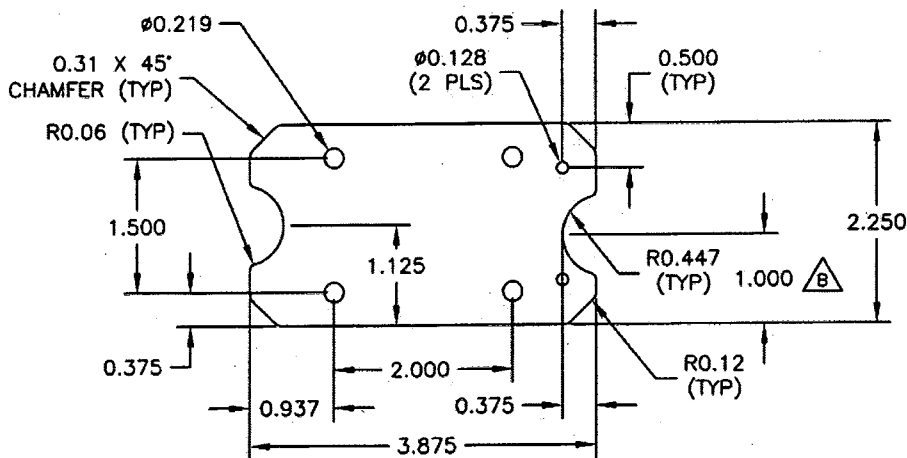


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DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:2

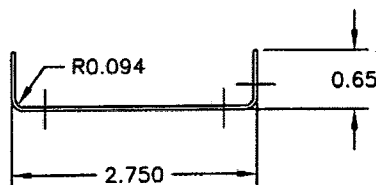


**D3304-5 FLAT PATTERN**

RELEASED  
05.08.11



**D3304-7/-8 FLAT PATTERN**



**D3304-5/-7 BRACKET  
D3304-8 OPPOSITE**

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NO. 42108

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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